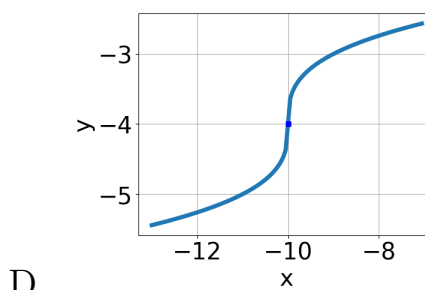
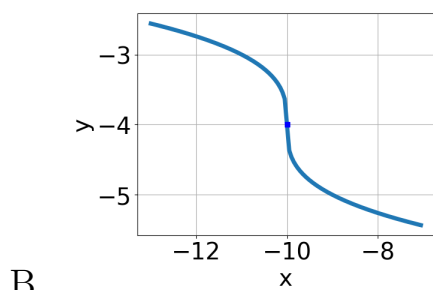
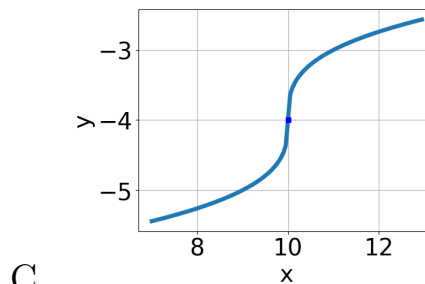
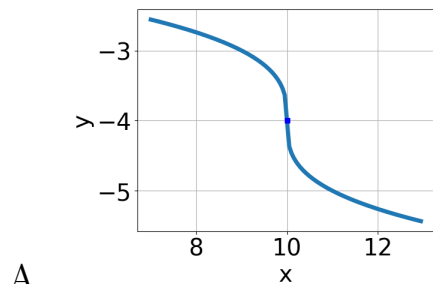


1. Choose the graph of the equation below.

$$f(x) = \sqrt[3]{x - 10} - 4$$



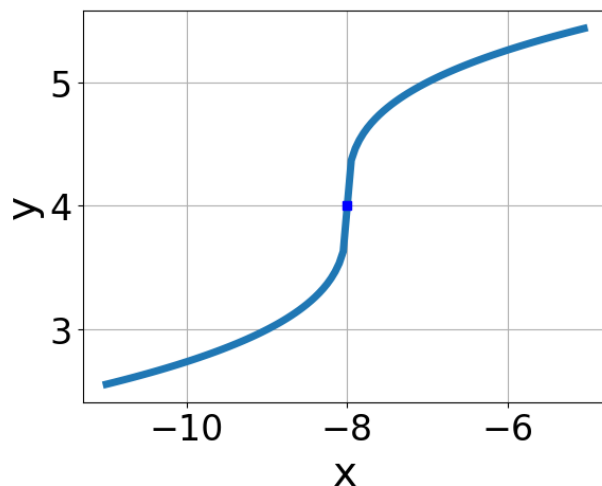
- E. None of the above.

2. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-56x^2 + 12} - \sqrt{-26x} = 0$$

- A.  $x \in [0.48, 0.99]$   
 B.  $x_1 \in [-0.12, 0.53]$  and  $x_2 \in [-0.25, 4.75]$   
 C. All solutions lead to invalid or complex values in the equation.  
 D.  $x_1 \in [-0.84, -0.19]$  and  $x_2 \in [-0.25, 4.75]$   
 E.  $x \in [-0.84, -0.19]$

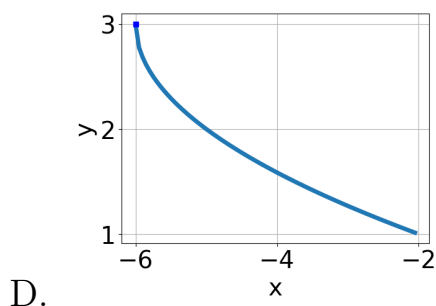
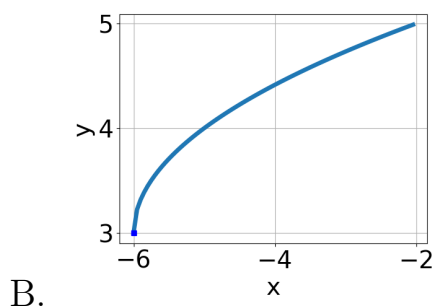
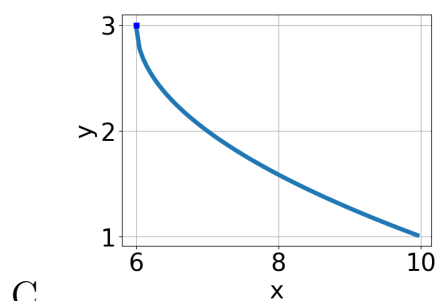
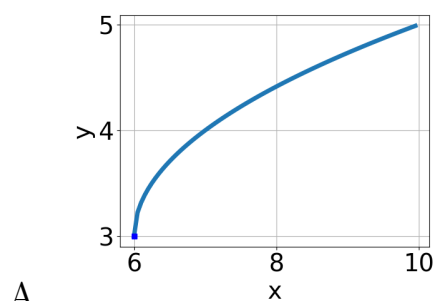
3. Choose the equation of the function graphed below.



- A.  $f(x) = -\sqrt[3]{x+8} + 4$   
 B.  $f(x) = \sqrt[3]{x-8} + 4$   
 C.  $f(x) = -\sqrt[3]{x-8} + 4$   
 D.  $f(x) = \sqrt[3]{x+8} + 4$   
 E. None of the above

4. Choose the graph of the equation below.

$$f(x) = -\sqrt{x-6} + 3$$



E. None of the above.

---

5. What is the domain of the function below?

$$f(x) = \sqrt[5]{-5x + 6}$$

- A. The domain is  $[a, \infty)$ , where  $a \in [1.06, 1.44]$
  - B. The domain is  $[a, \infty)$ , where  $a \in [0.72, 1.05]$
  - C. The domain is  $(-\infty, a]$ , where  $a \in [0.88, 1.42]$
  - D.  $(-\infty, \infty)$
  - E. The domain is  $(-\infty, a]$ , where  $a \in [0.58, 0.88]$
- 

6. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{8x + 6} - \sqrt{2x - 8} = 0$$

- A.  $x_1 \in [-3.04, -1.63]$  and  $x_2 \in [-5.75, 3.25]$
  - B.  $x \in [0.14, 0.6]$
  - C. All solutions lead to invalid or complex values in the equation.
  - D.  $x \in [-3.04, -1.63]$
  - E.  $x_1 \in [-1.66, -0.2]$  and  $x_2 \in [2, 9]$
- 

7. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{8x + 4} - \sqrt{7x + 8} = 0$$

- A. All solutions lead to invalid or complex values in the equation.
- B.  $x \in [3.31, 4.38]$
- C.  $x_1 \in [-1.15, -0.8]$  and  $x_2 \in [-3.5, 1.5]$

D.  $x_1 \in [-1.05, -0.39]$  and  $x_2 \in [2, 9]$

E.  $x \in [-12.21, -11.83]$

---

8. What is the domain of the function below?

$$f(x) = \sqrt[7]{-9x - 3}$$

A.  $(-\infty, \infty)$

B. The domain is  $[a, \infty)$ , where  $a \in [-4, -2]$

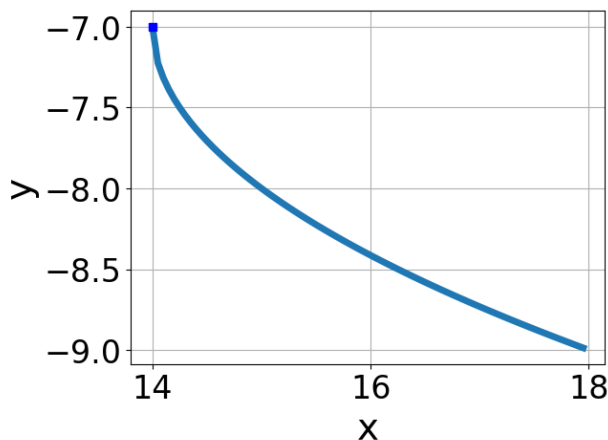
C. The domain is  $(-\infty, a]$ , where  $a \in [-1.7, -0.2]$

D. The domain is  $(-\infty, a]$ , where  $a \in [-3.9, -1.9]$

E. The domain is  $[a, \infty)$ , where  $a \in [-1.33, 0.67]$

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9. Choose the equation of the function graphed below.



A.  $f(x) = \sqrt{x - 14} - 7$

B.  $f(x) = \sqrt{x + 14} - 7$

C.  $f(x) = -\sqrt{x - 14} - 7$

D.  $f(x) = -\sqrt{x + 14} - 7$

E. None of the above

10. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{30x^2 + 36} - \sqrt{-69x} = 0$$

- A. All solutions lead to invalid or complex values in the equation.
  - B.  $x_1 \in [-0.08, 1.88]$  and  $x_2 \in [1.33, 1.81]$
  - C.  $x \in [-1.14, -0.53]$
  - D.  $x_1 \in [-2.84, -1.13]$  and  $x_2 \in [-2.44, -0.24]$
  - E.  $x \in [-2.84, -1.13]$
-